

Sex-based Differences in the Skin: Is It Just a Female Problem?



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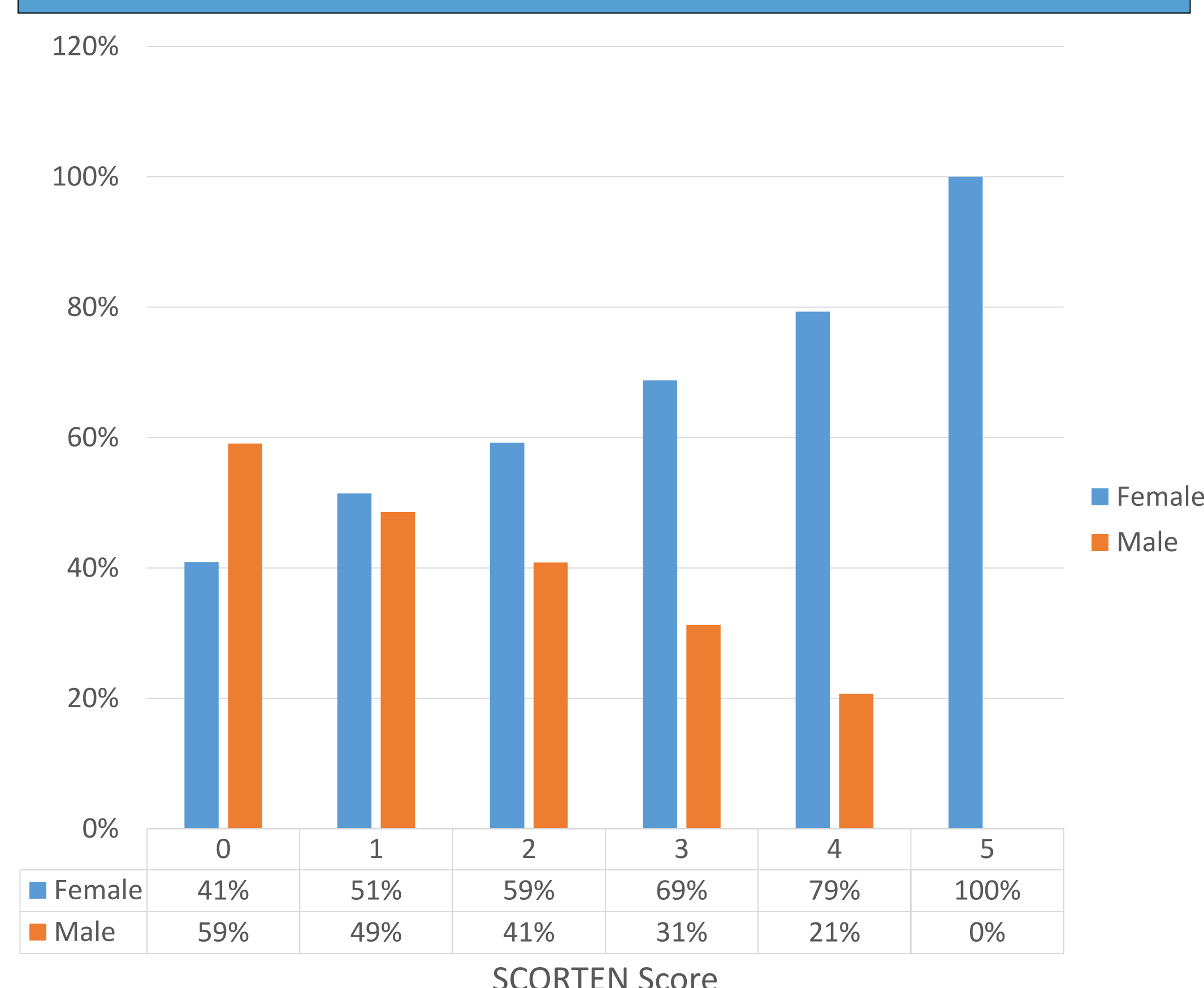
Female sex is associated with increased mortality in patients with Stevens-Johnson syndrome (SJS) and toxic epidermal necrolysis (TEN) spectrum disorders at our institution.

This study demonstrates sex-based differences related to skin desquamating disorders and may indicate a need for hypervigilance in inpatient management for women and a re-evaluation of prognostic scoring tools to include a variable for sex.

DATA SOURCE and RESULTS

- All patients admitted with biopsy-proven SJS, SJS/TEN overlap, and TEN between January 1, 2009 and December 31, 2018 were eligible for inclusion
- Demographics, length of stay, and mortality were evaluated
- Statistical analysis was performed with Student's t-test, chi-square, and Fischer's exact test
- One hundred and sixty-eight patients had biopsy-proven SJS, SJS/TEN overlap, or TEN
- Sixty-one percent of patients were female
- Average age of female patients was 51 years while the average age of male patients was 44 years, $p < 0.05$
- Fifty-six percent of female patients were black
- All three American Indian patients were female
- Female patients had significantly longer lengths of stay, 34 days versus 22 days, $p < 0.05$
- Female patients had a higher average SCORTEN (a severity of illness score of TEN) compared to male patients, as seen in Figure 1
- Thirty-three percent of female patients died compared to 18% of male patients, $p < 0.05$, as seen in Figure 2
- Two out of three American Indian patients in this cohort died

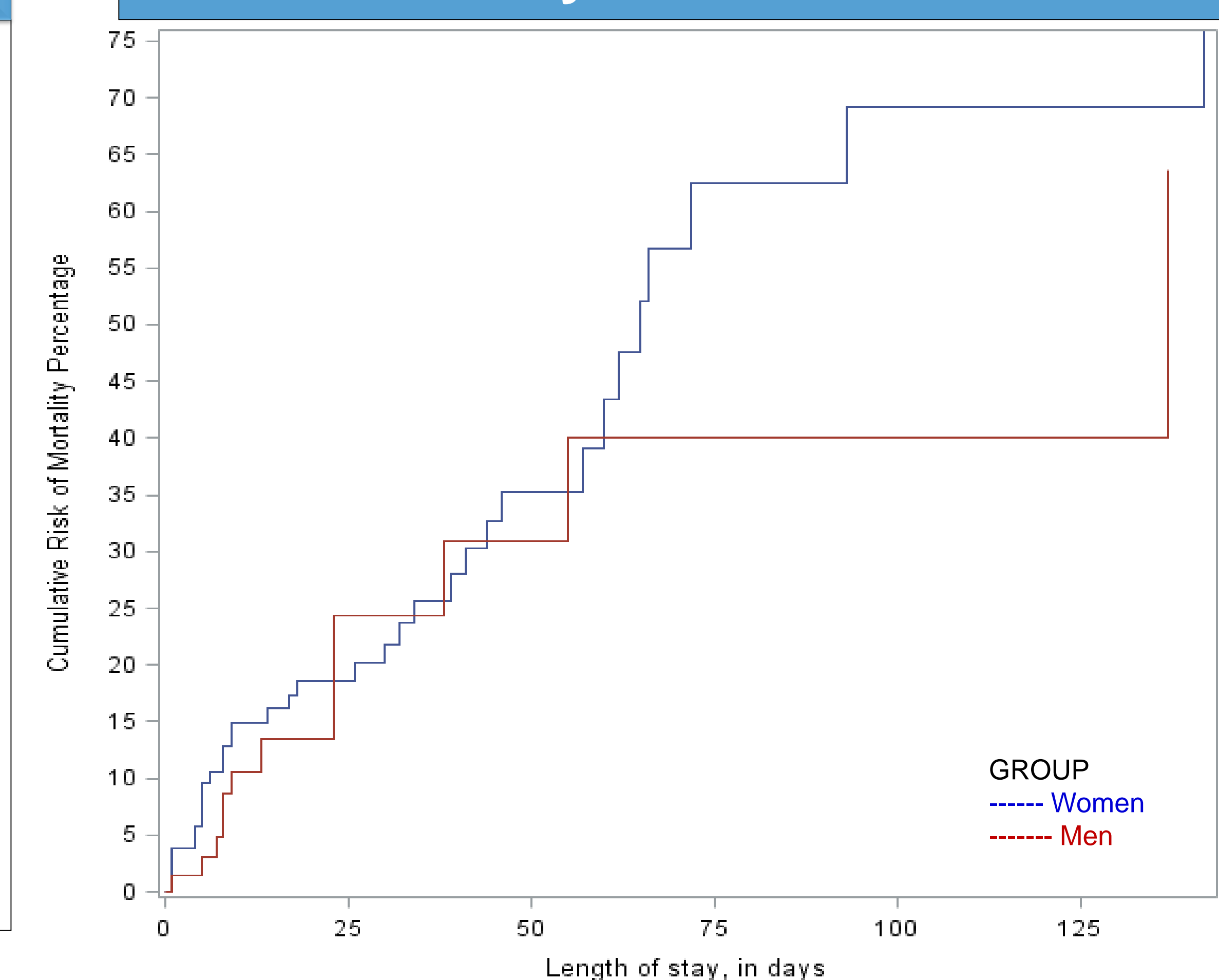
Figure 1: SCORTEN by Gender



Lessons Learned

- Females represent 51% of our state's population, but 61% of patients with biopsy proven SJS, SJS/TEN overlap, and TEN at our institution
- Compared to male patients, female patients presented with more severe disease (higher SCORTEN at presentation)
- Genomic and proteomic studies looking at sex-based differences may be helpful in elucidating the origin of these differences.

Figure 2: Cumulative Risk of Death by Gender



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